

GENERAL NOTES

1. Fasteners shall be high strength bolts (AASHTO M164 type 3). Bolts M22 ϕ , open holes 24 mm ϕ , unless otherwise noted.
2. Calculated mass of Structural Steel (M270M, Grade 345W) = 1,630,550 kg
Calculated mass of Structural Steel (M270M, Grade 345) = 5,600 kg
3. All structural steel shall be AASHTO M 270M Grade 345W except expansion joint plates and attached bars which shall be AASHTO M 270M Grade 345.
4. Expansion joint plates and attached bars shall be shop painted with the inorganic zinc rich primer.
5. Field welding of construction accessories will not be permitted to beams or girders.
6. The structural steel bearing plates of the Elastomeric Bearing Assembly shall conform to the requirements of AASHTO M 270M Grade 345W.
7. Anchor bolts shall be set before bolting diaphragms or cross frames over supports.
8. The main load carrying member components subject to tensile stress shall conform to the Supplemental Requirements for Notch Toughness Zone 2. These components are the wide flange beams, tension flanges and webs of plate girders and all splice plate material except fill plates.
9. Reinforcement bars shall conform to the requirements of AASHTO M 31M or M 322M Grade 400.
10. Layout of slope protection system may be varied in the field to suit ground conditions as directed by Engineer.
11. Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of 3 mm. Adjustment shall be made either by grinding the surface or by shimming the bearing. Two 3 mm adjusting shims, of the dimensions of the bottom bearing plate, shall be provided for each bearing in addition to all other plates or shims. For Type 1 Elastomeric Bearings, two 3 mm adjusting shims shall be provided for each bearing and placed as detailed.
12. The contractor shall drive 7-356 ϕ Metal Shell test piles in a permanent location. One each at the East and West Abutments, and one each at the five Piers as directed by the Engineer before ordering the remainder of piles.
13. Bridge Seat Sealer shall be applied to the seat area of the East Abutment, West Abutment and Pier 3.
14. All dimensions are in millimeters (mm) except as noted.
15. When deck pour is stopped for the day at one or more of the transverse Bonded Construction Joints in the deck Pouring Sequence as shown, the next pour shall not be made until both of the following requirements are met.
1. At least 72 hours shall have elapsed from the end of the previous pour.
2. The concrete strength shall have attained a minimum modulus of rupture of 4.5 MPa or a minimum compressive strength of 24 MPa.
16. The existing structural steel coating contains lead. The Contractor should take appropriate precautions to deal with the presence of lead on this project. No additional compensation will be made to properly dispose of the existing structure containing lead.
17. All construction joints shall be bonded.
18. AASHTO M 270M Grade 345W structural steel shall only be painted, for a distance of three times the depth of the beams or girders (but not exceeding 3 m) each way from the deck joints. All structural steel shall be cleaned as specified in the special provision for "Surface Preparation and Painting Requirements for Weathering Steel".

DESIGNED	BHS
CHECKED	KFA
DRAWN	MJB
CHECKED	GSP

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ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. S-2 72 SHEETS
F.A.L. 86-74	2626.2-R-2	LAKE COUNTY, INDIANA	452	234	
		ILLINOIS	FED. AID PROJECT-		

CONTRACT NO. 62113 INDOT DES. NO. 0100987

TOTAL BILL OF MATERIAL


ITEM	UNIT	PHASE 2		PHASE 3		TOTAL
		SUPER	SUB	SUPER	SUB	
(IN) Present Structure, Str. No. I-80-I-8460, Remove Portions	L. Sum	1				1
(IN) Field Welded Stud Shear Connector	Each	10,464				10,464
(IN) Test Pile, 356 mm	Each					7
(IN) Structure Backfill	m ³		153			153
(IN) Riprap, Revetment	m ²		2,122			2,122
(IN) Excavation, Foundation, Unclassified	m ³		878			878
(IN) Excavation, Wet	m ³		166			166
(IN) Excavation, Dry	m ³		455			455
(IN) Concrete, A, Substructure	m ³		902.7			902.7
(IN) Concrete, C, Superstructure	m ³	554.7				554.7
(IN) Surface Seal	L. Sum	0.75				0.75
(IN) Reinforcing Bars, Epoxy Coated	kg	71,290	63,880			135,170
(IN) Pile, Concrete, Steel Shell Encased, 6.35 mm, 356 mm	m		2,865.5			2,865.5
(IN) Structural Expansion Joint, SS	m	43.7				43.7
(IN) Threaded Tie Bar Assembly, Epoxy Coated	Each	1,465	424			1,889
(IN) Anchor Bolt	Each	154				154
Noise Abatement Wall Anchor Rod Assembly	Each	50				50
* Furnishing Structural Steel	L. Sum					0.54
Erecting Structural Steel	L. Sum	1				1
* Furnishing Elastomeric Bearing Assembly, Type I	Each					84
Erecting Elastomeric Bearing Assembly, Type I	Each		21			21
* Furnishing Elastomeric Bearing Assembly, Type II	Each					56
Erecting Elastomeric Bearing Assembly, Type II	Each		14			14
* Furnishing Floating Bearings, Guided Expansion, 1250 kN	Each					28
Erecting Floating Bearings, Guided Expansion, 1250 kN	Each		7			7
Storage of Structural Steel and Bearings	**					1,883

** For Storage of Structural Steel one unit shall be equal to 5 metric tons. The quantity was calculated based on the assumption that 25% of the steel mass has to be stored for 30 calendar days.

(IN) Indiana Pay Items, denoted by "(Indiana)" in Special Provisions and Summary of Quantities.

* FOR INFORMATION ONLY

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.L. ROUTE 80/34 (BORMAN EXPRESSWAY)
OVER LITTLE CALUMET RIVER & N.I.C.T.D. R.O.W.
GENERAL NOTES, INDEX OF SHEETS AND
TOTAL BILL OF MATERIAL
SECTION 2626.2-R-1
LAKE COUNTY, INDIANA
STATION 8 + 470.000
STRUCTURE NO. I-80-I-8460 (EB & WB)
DATE 07/04 (016-1003 & 016-1004)

AMERICAN
CONSULTING ENGINEERS